

Claims

- [c1] An isolated nucleic acid having at least 80% nucleic acid sequence identity to:
- (a) a nucleic acid sequence encoding the polypeptide shown in Figure 116 (SEQ ID NO:116);
 - (b) a nucleic acid sequence encoding the polypeptide shown in Figure 116 (SEQ ID NO:116), lacking its associated signal peptide;
 - (c) a nucleic acid sequence encoding the extracellular domain of the polypeptide shown in Figure 116 (SEQ ID NO:116);
 - (d) a nucleic acid sequence encoding the extracellular domain of the polypeptide shown in Figure 116 (SEQ ID NO:116), lacking its associated signal peptide;
 - (e) the nucleic acid sequence shown in Figure 115 (SEQ ID NO:115);
 - (f) the full-length coding sequence of the nucleic acid sequence shown in Figure 115 (SEQ ID NO:115); or
 - (g) the full-length coding sequence of the cDNA deposited under ATCC accession number 203459.
- [c2] The isolated nucleic acid of Claim 1 having at least 85% nucleic acid sequence identity to:
- (a) a nucleic acid sequence encoding the polypeptide shown in Figure 116 (SEQ ID NO:116);
 - (b) a nucleic acid sequence encoding the polypeptide shown in Figure 116 (SEQ ID NO:116), lacking its associated signal peptide;
 - (c) a nucleic acid sequence encoding the extracellular domain of the polypeptide shown in Figure 116 (SEQ ID NO:116);
 - (d) a nucleic acid sequence encoding the extracellular domain of the polypeptide shown in Figure 116 (SEQ ID NO:116), lacking its associated signal peptide;
 - (e) the nucleic acid sequence shown in Figure 115 (SEQ ID NO:115);
 - (f) the full-length coding sequence of the nucleic acid sequence shown in Figure 115 (SEQ ID NO:115); or
 - (g) the full-length coding sequence of the cDNA deposited under ATCC accession number 203459.
- [c3] The isolated nucleic acid of Claim 1 having at least 90% nucleic acid sequence identity to:

- (a) a nucleic acid sequence encoding the polypeptide shown in Figure 116 (SEQ ID NO:116);
- (b) a nucleic acid sequence encoding the polypeptide shown in Figure 116 (SEQ ID NO:116), lacking its associated signal peptide;
- (c) a nucleic acid sequence encoding the extracellular domain of the polypeptide shown in Figure 116 (SEQ ID NO:116);
- (d) a nucleic acid sequence encoding the extracellular domain of the polypeptide shown in Figure 116 (SEQ ID NO:116), lacking its associated signal peptide;
- (e) the nucleic acid sequence shown in Figure 115 (SEQ ID NO:115);
- (f) the full-length coding sequence of the nucleic acid sequence shown in Figure 115 (SEQ ID NO:115); or
- (g) the full-length coding sequence of the cDNA deposited under ATCC accession number 203459.

[c4]

The isolated nucleic acid of Claim 1 having at least 95% nucleic acid sequence identity to:

- (a) a nucleic acid sequence encoding the polypeptide shown in Figure 116 (SEQ ID NO:116);
- (b) a nucleic acid sequence encoding the polypeptide shown in Figure 116 (SEQ ID NO:116), lacking its associated signal peptide;
- (c) a nucleic acid sequence encoding the extracellular domain of the polypeptide shown in Figure 116 (SEQ ID NO:116);
- (d) a nucleic acid sequence encoding the extracellular domain of the polypeptide shown in Figure 116 (SEQ ID NO:116), lacking its associated signal peptide;
- (e) the nucleic acid sequence shown in Figure 115 (SEQ ID NO:115);
- (f) the full-length coding sequence of the nucleic acid sequence shown in Figure 115 (SEQ ID NO:115); or
- (g) the full-length coding sequence of the cDNA deposited under ATCC accession number 203459.

[c5]

The isolated nucleic acid of Claim 1 having at least 99% nucleic acid sequence identity to:

- (a) a nucleic acid sequence encoding the polypeptide shown in Figure 116 (SEQ ID NO:116);

- (b) a nucleic acid sequence encoding the polypeptide shown in Figure 116 (SEQ ID NO:116), lacking its associated signal peptide;
- (c) a nucleic acid sequence encoding the extracellular domain of the polypeptide shown in Figure 116 (SEQ ID NO:116);
- (d) a nucleic acid sequence encoding the extracellular domain of the polypeptide shown in Figure 116 (SEQ ID NO:116), lacking its associated signal peptide;
- (e) the nucleic acid sequence shown in Figure 115 (SEQ ID NO:115);
- (f) the full-length coding sequence of the nucleic acid sequence shown in Figure 115 (SEQ ID NO:115); or
- (g) the full-length coding sequence of the cDNA deposited under ATCC accession number 203459.

[c6]

An isolated nucleic acid comprising:

- (a) a nucleic acid sequence encoding the polypeptide shown in Figure 116 (SEQ ID NO:116);
- (b) a nucleic acid sequence encoding the polypeptide shown in Figure 116 (SEQ ID NO:116), lacking its associated signal peptide;
- (c) a nucleic acid sequence encoding the extracellular domain of the polypeptide shown in Figure 116 (SEQ ID NO:116);
- (d) a nucleic acid sequence encoding the extracellular domain of the polypeptide shown in Figure 116 (SEQ ID NO:116), lacking its associated signal peptide;
- (e) the nucleic acid sequence shown in Figure 115 (SEQ ID NO:115);
- (f) the full-length coding sequence of the nucleic acid sequence shown in Figure 115 (SEQ ID NO:115); or
- (g) the full-length coding sequence of the cDNA deposited under ATCC accession number 203459.

[c7]

The isolated nucleic acid of Claim 6 comprising a nucleic acid sequence encoding the polypeptide shown in Figure 116 (SEQ ID NO:116).

[c8]

The isolated nucleic acid of Claim 6 comprising a nucleic acid sequence encoding the polypeptide shown in Figure 116 (SEQ ID NO:116), lacking its associated signal peptide.

[c9]

The isolated nucleic acid of Claim 6 comprising a nucleic acid sequence

encoding the extracellular domain of the polypeptide shown in Figure 116 (SEQ ID NO:116).

[c10] The isolated nucleic acid of Claim 6 comprising a nucleic acid sequence encoding the extracellular domain of the polypeptide shown in Figure 116 (SEQ ID NO:116), lacking its associated signal peptide.

[c11] The isolated nucleic acid of Claim 6 comprising the nucleic acid sequence shown in Figure 115 (SEQ ID NO:115).

[c12] The isolated nucleic acid of Claim 6 comprising the full-length coding sequence of the nucleic acid sequence shown in Figure 115 (SEQ ID NO:115).

[c13] The isolated nucleic acid of Claim 6 comprising the full-length coding sequence of the cDNA deposited under ATCC accession number 203459.

[c14] An isolated nucleic acid that hybridizes to:
(a) a nucleic acid sequence encoding the polypeptide shown in Figure 116 (SEQ ID NO:116);
(b) a nucleic acid sequence encoding the polypeptide shown in Figure 116 (SEQ ID NO:116), lacking its associated signal peptide;
(c) a nucleic acid sequence encoding the extracellular domain of the polypeptide shown in Figure 116 (SEQ ID NO:116);
(d) a nucleic acid sequence encoding the extracellular domain of the polypeptide shown in Figure 116 (SEQ ID NO:116), lacking its associated signal peptide;
(e) the nucleic acid sequence shown in Figure 115 (SEQ ID NO:115);
(f) the full-length coding sequence of the nucleic acid sequence shown in Figure 115 (SEQ ID NO:115); or
(g) the full-length coding sequence of the cDNA deposited under ATCC accession number 203459.

[c15] The isolated nucleic acid of Claim 14, wherein said hybridization occurs under stringent conditions.

[c16] The isolated nucleic acid of Claim 14 which is at least 10 nucleotides in length.

[c17] A vector comprising the nucleic acid of Claim 1.

- [c18] The vector of Claim 17, wherein said nucleic acid is operably linked to control sequences recognized by a host cell transformed with the vector.
- [c19] A host cell comprising the vector of Claim 17.
- [c20] The host cell of Claim 19, wherein said cell is a CHO cell, an *E. coli* or a yeast cell.

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